



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/689,702

10/22/2003

Manhee Jo

244256US8

4650

22850

7590

10/08/2008

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

SAMUEL, DEWANDA A

ART UNIT

PAPER NUMBER

2416

NOTIFICATION DATE

DELIVERY MODE

10/08/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/689,702	Applicant(s) JO ET AL.	
	Examiner DEWANDA SAMUEL	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 3 and 7-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to the communication filed on 06/13/2008.
2. Claims 1-18 are pending.

Response to Arguments

3. Applicant's arguments with respect to claim 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1, 2 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugai et al. (US 7,167,474) in view of Tsukakoshi et al. (US Patent 6,496,510).

With regard to claim 1, Sugai et al. disclose having a routing control system, comprising: a plurality routing devices for transferring packets on a network, and a control server for controlling a transfer route of said packets, **(Sugai et al. discloses having a network 50 comprised router 1 which includes a routing manager 60 interpreted as " control server" exchanging routing information with other routers interpreted as "plurality routing devices". It is known in the art that routers transfer packets or frames to their destination, wherein each of said plurality routing devices includes routing related information reception means for receiving routing related information from an adjacent routing device, (Sugai et al. discloses others routers receive routing information from the routing manager 60 (" control server", column 4 line 60-67).**

However, Sugai et al. does not explicitly discloses wherein each of said plurality routing devices includes routing related information reception means for receiving routing related information from an adjacent routing device, **(Tsukakoshi et al. discloses having a plurality of router node devices ("plurality routing devices") receiving routing information ("routing related information") from other router node devices ("adjacent routing device", Abstract); generation means for generating a temporary routing control table based on the received routing related information, (Tsukakoshi et al. discloses further discloses having a routing table generation unit for creating a routing table according to the routing information**

Art Unit: 2616

collected (Abstract); transmission means for transmitting the temporary routing control table generated by said generation means to said control server, **(Tsukakoshi et al. discloses distributing interpreted as "transmission means" a generated routing table to other routing node devices (Abstract);** reception means for a plurality of the temporary routing control tables transmitted by the transmission means of said plurality of routing devices, **(Tsukakoshi et al. discloses generating routing table based on the routing information distributed from the other router node devices (Abstract);** control means for controlling the transfer route of said packets via at least one of said plurality of routing devices by using the plurality of the temporary routing control tables received by said reception means, **(Tsukakoshi et al. discloses having a forwarding unit using routing table received from a routing collection unit ("reception means", Abstract).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement of the components of Tsukakoshi et al. into Sugai et al. system providing routing components that advantageously provide a efficient network with autonomous route control.

With regard to claim 2, in combination Sugai et al. and Tskakoshi et al. teaches the routing control system recited in claim 1 . However, Sugai et al. dose not explicitly discloses having a transmission means of each of said plurality of routing devices

Art Unit: 2616

transmits said temporary routing control table to said control server when the temporary routing control table of said packets is changed or regenerated, **(Tsukakoshi et al. discloses having a plurality router node devices comprised of distribution unit ("transmission means") within each router node device transmitting routing information to other router node devices (Abstract). Tsukakoshi et al. further discloses each forwarding unit 15 forwards packets according to the contents of the routing table determined by the received update contents of the routing table 22, see column 6 line 8-10).** It is inferred the information in the routing table is updated meaning information is temporary.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a router 1 comprise of a routing manager as taught by Sugai et al. receiving routing information from a plurality router node devices and as taught by Tsukakoshi et al. provide a efficient network with autonomous route control.

With regard to claim 17, the routing control system is interpreted and rejected on the same grounds as routing control system 1.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable

Art Unit: 2616

over Sugai et al. (US 7,167,474) in view of Tsukakoshi et al. (US Patent 6,496,510) as applied to claim 1 above, and further in view of Ayandeh (US Patent 6,069,895).

With regard to claim 4, in combination Sugai et al. and Tskakoshi et al. teaches the routing control system recited in claim 1 .wherein said control server, (**Sugai et al. discloses having a router 1 comprise of a routing manager 60 interpreted as "control server", see column 4 line 60-67).**

However, Sugai et al. does not discloses includes update means for updating a first temporary routing control information table received by said reception means to a second temporary routing control information table that is newly received by said reception means when a predetermined time has elapsed after said first temporary routing control information table is stored, and then storing said second temporary routing control table in storage means as routing control information, (**Ayandeh discloses having a network route server interpreted as a "control server" comprised of a intelligent line-cards whereby provides a mechanism for refreshing the routing tables at a regular interval , see column 8 line 1-22).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have router 1 comprise of a routing manager 60 ("control server") as taught by Sugai et al. utilizing intelligent line- cards whereby provides a mechanism for refreshing the routing tables at a regular interval as taught by Ayandeh advantageously provide a efficient network with autonomous route control.

8. **Claims 5 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US Patent 6,760,314)in view of Tsukakoshi et al. (US Patent 6,496,510).

With regard to claim 5, Iwata discloses having a router server a routing control server which is connected to a plurality routing devices for transferring packets on a network and controlling the transfer route of said packets, comprising: reception means for receiving, in the routing control server, a plurality of temporary routing control information tables transmitted from said plurality routing devices, each of the plurality of temporary routing control tables, (**Iwata disclose having a load distribution server ("control server") connected to a plurality of nodes (10a-10d ", routing devices)...node 10a comprised a transmission unit 17 transmit data to adjacent nodes 10b-10d see column 6 line 17-25)**; being generated, by a corresponding routing device of the plurality of routing devices, based on routing related information received from an adjacent routing device,(**Iwata discloses having a load distribution server 30 ("control server") connected to a plurality node 10a-10d ("plurality routing devices") whereby receiving network state information from all of the nodes 10a-10d, see column 6 line 17-25).**

However, Iwata does not explicitly discloses reception means for receiving, in the routing control sever, plurality of temporary routing control tables transmitted from said plurality of routing devices, each of the plurality of temporary routing control tables being

Art Unit: 2616

generated, by a routing device of the plurality of routing devices, based on routing related information received from an adjacent routing device,(**Tsukakoshi et al. discloses routing node devices distributing routing information within the routing table to other routing node devices and the routing information is based on routing information collected for other routing devices, see Abstract**); control means for controlling the transfer route of said packets via at least one of said plurality of routing devices by using the plurality of temporary routing control tables received by said reception unit,(**Tsukakoshi et al. discloses having a forwarding unit interpreted as "control unit" for forwarding a packet between one network and for forwarding the packet between the network connected to the router node device according to routing table (Abstract). Tsukakoshi et al. further discloses each forwarding unit 15 forwards packets according to the contents of the routing table determined by the received update contents of the routing table 22, see column 6 line 8-10).**It is inferred the information in the routing table is updated meaning information is temporary.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate sending and receiving updated state information as taught by Iwata into Tsukakoshi et al. system advantageously provide a efficient process for data at a higher speed.

With regard to claim 18, the routing control sever claim is interpreted and rejected on the same grounds as the routing control server claim 5.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al. (US Patent 6,496,510) in view of Iwata (US Patent 6,760,314).

With regard to claim 6, Tsukakoshi et al. discloses having a routing control method comprising: receiving, in each of a plurality of routing devices, routing related information from an ad/adjacent routing device, (**Tsukakoshi et al. discloses having a plurality router node devices ("plurality routing devices") distributing routing information to other router node devices (Abstract)**); generating a temporary routing control table, within each of the plurality of routing devices, based on the received routing related information,(**Tsukakoshi et al. discloses having a routing table generation unit for generating the routing table based on the collected routing information and the routing information distributed from the other router node devices , see Abstract**); receiving a plurality of the transmitted temporary routing control information tables in the control server,(**Tsukakoshi et al. discloses having a cluster type network comprised of a plurality of router nodes transferring routing protocol packets to or from the cluster type router 11 interpreted as " control server") to get network connection information, see column 3 line 37-67**); and controlling, using the control server the transfer route of said packets via at least one of said plurality of routing devices by using the received plurality of temporary routing

Art Unit: 2616

control tables received, (**Tsukakoshi et al. discloses having a forwarding unit interpreted as a "control unit" for forwarding a packet between one network and for forwarding the packet between the network connected to the router node device and according to routing table, see Abstract**). **Tsukakoshi et al. further discloses each forwarding unit 15 forwards packets according to the contents of the routing table determined by the received update contents of the routing table 22, see column 6 line 8-10**). It is inferred the information in the routing table is updated meaning information is temporary.

However, Tsukakoshi et al. does not explicitly disclose sending temporary routing control table to a control server,(**Iwata discloses having a load distribution server 30 interpreted as a "control server" receiving network state information from the plural nodes (Abstract**). It is construed this information is capable of being in the form of a table), receive a plurality of the temporary routing control tables transmitted by the transmission unit of said plurality of routing devices,(**Iwata discloses having a load distribution server 30 receiving network state information from the plural nodes interpreted "plurality routing devices", Abstract**). It is construed this information is capable of being in the form of a table.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate sending and receiving updated state information as taught by Iwata into Tsukakoshi et al. system advantageously provide a efficient network with autonomous route control.

Allowable Subject Matter

10. Claims 3, 7-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2616

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEWANDA SAMUEL whose telephone number is (571)270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/689,702

Page 13

Art Unit: 2616

/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2616

/DeWanda Samuel/
Examiner, Art Unit 2616
10/8/2008